52. (New) The isolated polypeptide of claim 51, which consists essentially of a fusion between the CDR3 region and a CDR2 region of said heavy chain antibody.

53. (New) The isolated polypeptide of claim 45, which comprises at most 100 amino acids.

54. (New) The isolated polypeptide of claim 53, which comprises from 3 to 60 amino acids.

58. (New) The isolated polypeptide of claim 53, which comprises from 3 to 30 amino acids.

- 56. (New) The isolated polypeptide of claim 46, wherein said antibody fragment is a fragment of a penetrating antibody.
- 57. (New) The isolated polypeptide of claim 56, wherein said penetrating antibody is a polyreactive antibody.
- 58. (New) The isolated polypeptide of claim 56, wherein said penetrating antibody is an anti-DNA antibody.
- 59. (New) The isolated polypeptide of claim 56, which comprises a sequence selected from the group consisting of SEQ ID NO: 1, amino acids 2-17 of SEQ ID NO:1, amino acids 3-17 of SEQ ID NO:1, amino acids 4-17 of SEQ ID NO:1, SEQ ID NO: 2, amino acids 2-17 of SEQ ID NO:2, amino acids 3-17 of SEQ ID NO:2, amino acids 4-17 of SEQ ID NO:3, amino acids 3-17 of SEQ ID NO:3, amino acids 3-17 of SEQ ID NO:3, amino acids 4-17 of SEQ ID NO:3, sequence selected from the group consisting of SEQ ID NO:1, amino acids 2-17 of SEQ ID NO:2, amino acids 3-17 of SEQ ID NO:3, amino acids 4-17 of SEQ ID NO:3, amino acids 3-17 of SEQ ID NO:3, amino acids 4-17 of SEQ ID NO:
- 60. (New) The isolated polypeptide of claim 45, which further comprises a basic amino acid region.

(New) The isolated polypeptide of claim 69, wherein said basic amino acid is lysine.

- 62. (New) The isolated polypeptide of claim 45, wherein the amino acid sequence is obtained by screening a peptide library for a cell penetration activity.
- 63. (New) The isolated polypeptide claim 45, wherein said polypeptide reacts *in vitro* with one or more macromolecules selected the group consisting of anionic macromolecules, double-stranded RNA, single-stranded RNA, DNA, cationic macromolecules and histones.

64. (New) The isolated polypeptide of claim 45, which reacts in vitro with heparin and heparin sulphate.

- 65. (New) An isolated polypeptide, comprising a polylysine region and a region derived from a penetrating polyreactive antibody, wherein the isolated polypeptide penetrates into a cell.
- 66. (New) The isolated polypeptide claim 64, wherein said polypeptide reacts *in vitro* with one or more macromolecules selected the group consisting of anionic macromolecules, double-stranded RNA, single-stranded RNA, DNA, cationic macromolecules and histories.
- 67. (New) The isolated polypeptide of claim 45, which reacts *in vitro* with heparin and heparin sulphate.